

PRECAUTIONS—SURFACE ONLY

**§ 57.3430 Activity between machinery or equipment and the highwall or bank.**

Persons shall not work or travel between machinery or equipment and the highwall or bank where the machinery or equipment may hinder escape from falls or slides of the highwall or bank. Travel is permitted when necessary for persons to dismount.

PRECAUTIONS—UNDERGROUND ONLY

**§ 57.3460 Maintenance between machinery or equipment and ribs.**

Persons shall not perform maintenance work between machinery or equipment and ribs unless the area has been tested and, when necessary, secured.

**§ 57.3461 Rock bursts.**

(a) Operators of mines which have experienced a rock burst shall—

(1) Within twenty four hours report to the nearest MSHA office each rock burst which:

- (i) Causes persons to be withdrawn;
- (ii) Impairs ventilation;
- (iii) Impedes passage; or
- (iv) Disrupts mining activity for more than one hour.

(2) Develop and implement a rock burst control plan within 90 days after a rock burst has been experienced.

(b) The plan shall include—

(1) Mining and operating procedures designed to reduce the occurrence of rock bursts;

(2) Monitoring procedures where detection methods are used; and

(3) Other measures to minimize exposure of persons to areas which are prone to rock bursts.

(c) The plan shall be updated as conditions warrant.

(d) The plan shall be available to an authorized representative of the Secretary and to miners or their representatives.

**Subpart C—Fire Prevention and Control**

AUTHORITY: Sec. 101, Federal Mine Safety and Health Act of 1977, Pub. L. 91-173 as amended by Pub. L. 95-164, 91 Stat. 1291 (30 U.S.C. 811).

**§ 57.4000 Definitions.**

The following definitions apply in this subpart.

*Booster fan.* A fan installed in the main airstream or a split of the main airstream to increase airflow through a section or sections of a mine.

*Combustible liquids.* Liquids having a flash point at or above 100 ° F (37.8 ° C). They are divided into the following classes:

Class II liquids—those having flash points at or above 100 ° F (37.8 ° C) and below 140 ° F (60 ° C).

Class IIIA liquids—those having flash points at or above 140 ° F (60 ° C) and below 200 ° F (93.4 ° C).

Class IIIB liquids—those having flash points at or above 200 ° F (93.4 ° C).

*Combustible material.* A material that, in the form in which it is used and under the conditions anticipated, will ignite, burn, support combustion, or release flammable vapors when subjected to fire or heat. Wood, paper, rubber, and plastics are examples of combustible materials.

*Escapeway.* A designated passageway by which persons can leave an underground mine.

*Fire resistance rating.* The time, in minutes or hours, that an assembly of materials will retain its protective characteristics or structural integrity upon exposure to fire.

*Flame spread rating.* The numerical designation that indicates the extent flame will spread over the surface of a material during a specified period of time.

*Flammable gas.* A gas that will burn in the normal concentrations of oxygen in the air.

*Flammable liquid.* A liquid that has a flash point below 100 ° F (37.8 ° C), a vapor pressure not exceeding 40 pounds per square inch (absolute) at 100 ° F (37.8 ° C), and is known as a Class I liquid.

*Flash point.* The minimum temperature at which sufficient vapor is released by a liquid to form a flammable vapor-air mixture near the surface of the liquid.

*Main fan.* A fan that controls the entire airflow of an underground mine or the airflow of one of the major air circuits of the mine.

*Mine opening.* Any opening or entrance from the surface into an underground mine.

*Multipurpose dry-chemical fire extinguisher.* An extinguisher having a rating of at least 2-A:10-B:C and containing a nominal 4.5 pounds or more of dry-chemical agent.

*Noncombustible material.* A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors when subjected to fire or heat. Concrete, masonry block, brick, and steel are examples of noncombustible materials.

*Safety can.* A container of not over five gallons capacity that is designed to safely relieve internal pressure when exposed to heat and has a spring-closing lid and spout cover.

*Storage tank.* A container exceeding 60 gallons in capacity used for the storage of flammable or combustible liquids.

**§ 57.4011 Abandoned electric circuits.**

Abandoned electric circuits shall be deenergized and isolated so that they cannot become energized inadvertently.

**§ 57.4057 Underground trailing cables.**

Underground trailing cables shall be accepted or approved by MSHA as flame resistant.

[57 FR 61223, Dec. 23, 1992]

PROHIBITIONS/PRECAUTIONS/  
HOUSEKEEPING

**§ 57.4100 Smoking and use of open flames.**

No person shall smoke or use an open flame where flammable or combustible liquids, including greases, or flammable gases are—

- (a) Used or transported in a manner that could create a fire hazard; or
- (b) Stored or handled.

**§ 57.4101 Warning signs.**

Readily visible signs prohibiting smoking and open flames shall be posted where a fire or explosion hazard exists.

**§ 57.4102 Spillage and leakage.**

Flammable or combustible liquid spillage or leakage shall be removed in a timely manner or controlled to prevent a fire hazard.

**§ 57.4103 Fueling internal combustion engines.**

Internal combustion engines shall be switched off before refueling if the fuel tanks are integral parts of the equipment. This standard does not apply to diesel-powered equipment.

**§ 57.4104 Combustible waste.**

(a) Waste materials, including liquids, shall not accumulate in quantities that could create a fire hazard.

(b) Waste or rags containing flammable or combustible liquids that could create a fire hazard shall be placed in the following containers until disposed of properly:

- (1) Underground—covered metal containers.
- (2) On the surface—covered metal containers or equivalent containers with flame containment characteristics.

**§ 57.4130 Surface electric substations and liquid storage facilities.**

The requirements of this standard apply to surface areas only.

(a) If a hazard to persons could be created, no combustible materials shall be stored or allowed to accumulate within 25 feet of the following:

- (1) Electric substations.
- (2) Unburied, flammable or combustible liquid storage tanks.
- (3) Any group of containers used for storage of more than 60 gallons of flammable or combustible liquids.

(b) The area within the 25-foot perimeter shall be kept free of dry vegetation.

**§ 57.4131 Surface fan installations and mine openings.**

(a) On the surface, no more than one day's supply of combustible materials shall be stored within 100 feet of mine openings or within 100 feet of fan installations used for underground ventilation.

(b) the one-day supply shall be kept at least 25 feet away from any mine